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In re Application of

Kucherlapati et al

Application Number

08/234145

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#29

(12) **United States Patent**
Kucherlapati et al.(10) **Patent No.: US 6,713,610 B1**
(45) **Date of Patent: Mar. 30, 2004**(54) **HUMAN ANTIBODIES DERIVED FROM
IMMUNIZED XENOMICE**(76) **Inventors:** **Raju Kucherlapati**, 8 Gracie La.,
Darien, CT (US) 06820; **Aya**
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Coutts Cir., Stanford, CA (US) 94305(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 52 days.(21) **Appl. No.: 09/614,092**(22) **Filed: Jul. 11, 2000****Related U.S. Application Data**(60) Division of application No. 08/724,752, filed on Oct. 2,
1996, now Pat. No. 6,150,584, which is a continuation-in-
part of application No. 08/430,938, filed on Apr. 27, 1995,
now abandoned, and a continuation-in-part of application
No. 08/234,145, filed on Apr. 28, 1994, now abandoned, and
a continuation-in-part of application No. 08/112,848, filed
on Aug. 27, 1993, now abandoned, and a continuation-in-
part of application No. 08/031,801, filed on Mar. 15, 1993,
and a continuation-in-part of application No. 07/919,297,
filed on Jul. 24, 1992, now abandoned, and a continuation-
in-part of application No. 07/610,515, filed on Nov. 8, 1990,
now abandoned, and a continuation-in-part of application
No. 07/466,008, filed on Jan. 12, 1990, now abandoned.(51) **Int. Cl. 7** **A61K 39/395; C07K 16/00**(52) **U.S. Cl.** **530/388.23; 530/387.1;**
530/388.1; 530/388.15; 424/130.1; 424/132.1;
424/141.1; 424/147.1; 424/145.1(58) **Field of Search** **530/350, 387.1,**
530/388.1, 388.15, 388.23; 536/23.1; 435/320.1;
424/147.1, 145.1, 130.1, 141.1(56) **References Cited****U.S. PATENT DOCUMENTS**4,950,599 A 8/1990 Bertling 435/456
4,959,313 A 9/1990 Taketo 435/69.1
5,204,244 A 4/1993 Fell et al. 435/68
5,286,647 A 2/1994 Handley et al. 435/240.27
5,545,806 A 8/1996 Lonberg et al. 800/802
5,545,807 A 8/1996 Surani et al. 800/2
5,569,825 A 10/1996 Lonberg et al. 800/2**FOREIGN PATENT DOCUMENTS**EP 0 298 807 A1 1/1989
EP 0 315 062 B1 5/1989
EP 0 322 240 B1 6/1989
EP 0 459 372 A3 12/1991
EP 0 463 151 B1 1/1992
WO WO 90/04036 4/1990
WO WO 91/00906 1/1991
WO WO 91/10741 7/1991
WO WO 92/03918 3/1992
WO WO 92/22645 12/1992
WO WO 93/05165 3/1993WO WO 93/12227 6/1993
WO WO 94/00569 1/1994
WO WO 94/02602 2/1994
WO WO 94/25585 11/1994
WO WO 96/34096 10/1996**OTHER PUBLICATIONS**Li et al.; *The I Binding Specificity of Human . . . and
Complementary Determining Region 3*, 1996, *J. Mol. Biol.*
256:577-589.*Albertson, et al., "Construction and characterization of a
yeast artificial chromosome library containing seven haploid
human genome equivalents," *Proc. Natl. Acad. Sci. U. S. A.*
87:4256-4260 (1990).Aldhous, "Transgenic mice display a class (switching) act,"
Science 262:1212-1213 (1993).Ayres, et al., "Sequence homology requirements for inter-
molecular recombination in mammalian cells," *Proc. Natl.*
Acad. Sci. U.S.A. 83:5199-5203 (1986).Berman, et al., "Content and organization of the human
 V_H locus: definition of three new V_H families and linkage to
the $Ig C_H$ locus" *EMBO J.* 7:727-738 (1988).Blankenstein, et al., "Immunoglobulin V_H region genes of
the mouse are organized in overlapping clusters" *Eur. J.*
Immunol. 17:1351-1357 (1987).Brinster, et al., "Introns increase transcriptional efficiency in
transgenic mice," *Proc. Natl. Acad. Sci. U.S.A.* 85:836-840
(1988).Brownstein, et al., "Isolation of single-copy human genes
from a library of yeast artificial chromosomes," *Science*
244:1348-1351 (1989).Bruggemann, et al., "A repertoire of monoclonal antibodies
with human heavy chains from transgenic mice," *Proc. Natl.*
Acad. Sci. U.S.A. 86:6709-6713 (1989).Bruggemann, et al., "Construction, function and immuno-
genicity of recombinant monoclonal antibodies," *Behring*
Inst. Mitt. 87:21-24 (1990).Bruggemann, et al., "Human antibody production in trans-
genic mice: expression from 100 kb of the human IgH
locus," *Eur. J. Immunol.* 21:1323-1326 (1991).Bruggemann, et al., "Strategies for expressing human anti-
body repertoires in transgenic mice," *Immunology Today*
17:391-397 (1996).Burke, et al., "Cloning of large segments of exogenous DNA
into yeast by means of artificial chromosome vectors,"
Science 236:806-812 (1987).Buttin, et al., "Exogenous Ig rearrangement in transgenic
mice: a new strategy for human monoclonal antibody pro-
duction," *Trends in Genetics* 3(8):205-206 (1987).

(List continued on next page.)

Primary Examiner—Anne M. Wehbe'(57) **ABSTRACT**Fully human antibodies against a specific antigen can be
prepared by administering the antigen to a transgenic animal
which has been modified to produce such antibodies in
response to antigenic challenge, but whose endogenous loci
have been disabled. Various subsequent manipulations can
be performed to obtain either antibodies per se or analogs
thereof.**14 Claims, 18 Drawing Sheets**